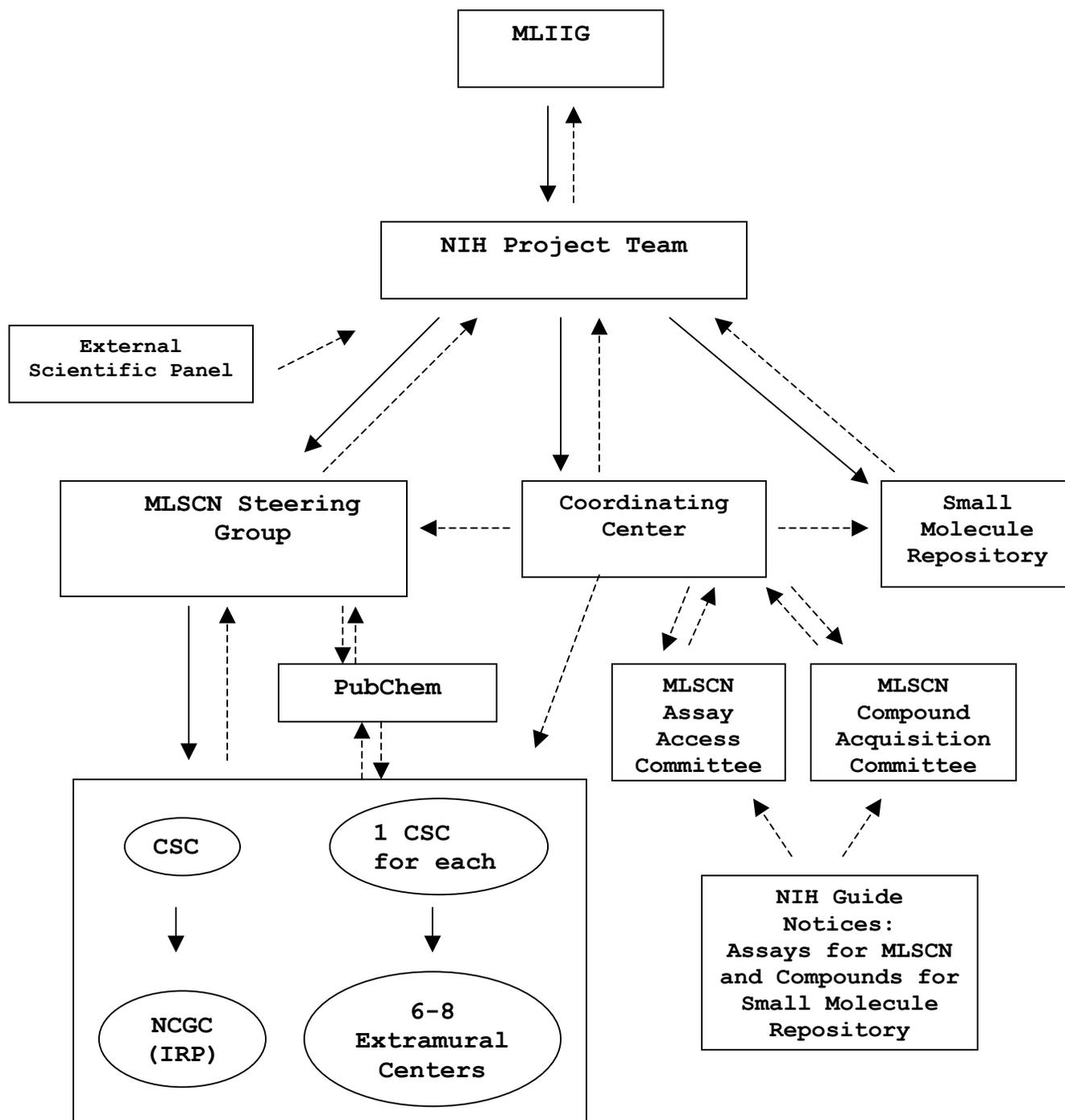


Figure 2. Proposed MLSCN Governance Model

Dashed arrows indicate communication functions; solid arrows indicate lines of authority.



Legend for Figure 2.

COORDINATING CENTER. A Coordinating Center will be established by NIH as a contract, and will provide a range of important services to the MLSCN. The Coordinating Center will assist in coordinating and tracking the activities of the MLSCN and its component screening centers, and will maintain a website that will provide up-to-date information on assays accepted for implementation in specific MLSCN centers, compounds accepted for entry into the Repository, confirmed hits within the network, and data depositions to PubChem. The Coordinating Center will also provide administrative support to the MLSCN Assay Access Committee, which will evaluate proposals from the research community for assays to be implemented by the MLSCN, and to the MLSCN Compound Acquisition Committee, which will evaluate requests for compounds to be incorporated into the Small Molecule Repository.

EXTERNAL SCIENTIFIC PANEL. The External Scientific Panel will be composed of 6-8 senior non-federal advisors who are not directly involved in the activities of the MLSCN and who will be appointed by the NIH Project Team with concurrence from the MLIIG. The External Scientific Panel will collectively provide expertise in molecular screening and the needs of academic scientists who will utilize the resources generated by the MLSCN, and will review the overall MLSCN program on a regular basis and provide feedback and recommendations to the NIH Project Team and the MLIIG.

MLSCN ASSAY ACCESS COMMITTEE. An NIH committee that will evaluate assay proposals for scientific merit and feasibility. The Scientific Review Administrator (SRA) for this panel will be an NIH review staff member and the panel members will be primarily non-federal scientists approved by the NIH Project Team. Recommendations of the MLSCN Assay Access Committee will be communicated to the NIH Project Team and to the MLSCN Steering Group.

MLSCN COMPOUND ACQUISITION COMMITTEE. An NIH committee that will evaluate proposals for the acquisition of small molecules from public and private sources for the Small Molecule Repository. The SRA for this panel will be an NIH review staff member and the panel members will be primarily non-federal scientists approved by the NIH Project Team. Recommendations of the MLSCN Compound Acquisition Committee will be communicated to the NIH Project Team and to the MLSCN Steering Group.

MOLECULAR LIBRARIES AND IMAGING IMPLEMENTATION GROUP (MLIIG). An oversight group composed of the Directors of NHGRI, NIMH, and NIBIB, who are the chairs for the Molecular Libraries and Imaging Roadmap Initiative, and the lead NIH staff for each component of the Roadmap. The group will provide overall guidance for the MLSCN program, coordination with other components of the Initiative, and resolution for cases in which consensus cannot be reached by the MLSCN Steering Group and the NIH Project Team. NIH Science Officers will not be voting members of the MLSCN Steering Committee.

MLSCN STEERING GROUP. The Steering Group for the overall MLSCN consisting of the Director (PI) of each of the extramural screening centers, the PI of the NIH Chemical Genomics Center (NCGC, the center housed in the NIH Intramural Research Program), and the NIH Science Officer for each extramural center. The NIH Science Officers may vote, and their total votes will count 1/2 as much as the total votes of the MLSCN center PIs. The PI of the of the Small Molecule Repository, the PI of the Coordinating Center, and the designated

lead for PubChem will be ex officio members. The Steering Group will be the primary operational governing board of the MLSCN. The functions of this group include: 1) recommending the assignment and scheduling of assays and tasks in conjunction with the NIH Project Team; 2) developing guidelines to standardize the validation of screening data in different types of assays across centers; 3) developing uniform procedures and policies for assay validation, data quality measures, assessment procedures, and annotation conventions for data depositions in conjunction with the NIH Project Team and NCBI PubChem designee; 4) serving as a venue for coordination on improving the state-of-the-art HTS in the academic sector by reporting progress, disseminating best practices, and collectively evaluating new procedures, resources, and technologies; 5) monitoring, developing, and implementing quality control procedures that assure consistency across centers; 6) facilitating the timely release of data in the format and on the schedule recommended by the MLSCN Steering Group and implemented by the NIH Project Team; and 7) developing and recommending progress report formats for both individual centers and for the MLSCN Program as a whole to the NIH Project Team.

NIH PROJECT TEAM. The NIH Project Team will serve as the governing body that coordinates and oversees the interaction of NIH with the centers and the MLSCN Steering Group. The NIH Project Team is composed of representatives from each of the NIH Institutes and Centers participating in the Molecular Libraries Initiative and will be overseen by the MLIIG. The functions of the NIH Project Team include: 1) setting guidelines and policies for the MLSCN based on recommendations from the MLSCN Steering Group; 2) nominating a rotating chair to communicate policy information to the MLSCN Steering Group and Coordinating Center; 3) providing the second level of review of the recommendations of the Assay Review Panel and the Compound Review Panel; 4) overseeing the assignment of assays to specific centers within the MLSCN; 5) overseeing the addition of new compounds to the Small Molecule Repository; and 6) communicating information about the progress of each center and the functions of the MLSCN Steering Group to the External Scientific Panel.

PUBCHEM. The NCBI database for the deposition of primary and secondary screening data for compounds in the Small Molecule Repository that are tested in assays optimized for HTS in the MLSCN, accession numbers for compounds in the NIH repository, description of the assays and assay protocols implemented at each center, the synthesis or isolation protocols for the compounds, sources, and Lipinski parameters, if available. LinkOuts may be established to capture additional biological data obtained in follow-up screening carried out in the public or private sector (see <http://www.ncbi.nlm.nih.gov/entrez/linkout/>).

SCREENING CENTER STEERING COMMITTEES (CSC). The Steering Committee for each individual screening center (intramural and extramural centers) consisting of key center personnel, external advisors, and the NIH Science Officer.